

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US98/21626

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : A61K 35/16; B01D 21/26; C07K 14/75; C12Q 1/56

US CL : Please See Extra Sheet.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 210/645, 702, 723, 729, 730, 782, 789; 435/2; 436/177, 178; 530/382, 418, 420, 421

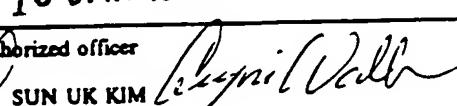
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,030,215 A (MORSE et al) 09 July 1991 (09.07.91), see col. 2, lines 18-45, col. 3, line 38 - col. 5, line 56, col. 5, lines 21-43, col. 6, lines 8-62.	1-5, 7-11
Y	US 5,226,877 A (EPSTEIN) 13 July 1993 (13.07.93), see col. 2, lines 18-29, col. 4, lines 13-23, col. 6, lines 1-61, col. 8, lines 27-66.	1-5, 7-11
Y,P	US 5,707,331 A (WELLS et al) 13 January 1998 (13.01.98), see col. 2, line 44 - col. 3, line 27, col. 5, line 25 - col. 6, line 4.	1-5, 7-11
Y	US 5,585,007 A (ANTANAVICH et al) 17 December 1996 (17.12.96), see col. 5, lines 16-26, col. 12, line 20 - col. 13, line 6.	1, 4-5, 10-11

<input type="checkbox"/>	Further documents are listed in the continuation of Box C.	<input type="checkbox"/>	See patent family annex.
A	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
B	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
L	earlier document published on or after the international filing date documents which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reasons (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
O	document referring to an oral disclosure, use, exhibition or other means	"Z"	document member of the same patent family
P	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search	Date of mailing of the international search report
09 DECEMBER 1998	13 JAN 1999
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile N. (703) 305-3230	Authorized officer SUN UK KIM  Telephone No. (703) 308-0661

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